

LES-24-028-NRC



2/29/2024

ATTN: Document Control Desk
Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Louisiana Energy Services, LLC
NRC Docket No. 70-3103

Subject: Semi-Annual Radiological Effluent Release Report for July 1, 2023
through December 31, 2023

Pursuant to 10 CFR 70.59, Louisiana Energy Services, LLC, also dba Urenco USA, herewith submits the subject report. Enclosure 1 specifies the quantities released of licensed principal radionuclides in liquid or gaseous form, to uncontrolled areas.

Should there be any questions regarding this submittal, please contact John Pfabe, Senior Licensing Specialist at 575.394.6061.

Respectfully,

A handwritten signature in blue ink, appearing to read "Chris Schwarz", is written over a light blue circular background.

Chris Schwarz
Licensing and ECP Manager

Enclosure:

1. Semi-Annual Radiological Effluent Release Report for July 1, 2023 through December 31, 2023

CC:

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LES-24-028-NRC



ENCLOSURE 1

**Semi-Annual Radiological Effluent Release Report for
July 1, 2023 through December 31, 2023**

URENCO USA: Report of Radioactivity in Effluents: Liquid & Air: July 2023 - December 2023

There were no releases to the public during the reporting period that exceeded regulatory requirements, and detected isotopic uranium activities were comparable to pre-operational activities. No dose assessment was performed because the maximum potential dose directly at the point of gaseous and liquid effluent discharge points were acceptable. The potential maximum doses directly at the discharge points for both liquid and gaseous effluent were shown to be less than 10% of the radionuclide concentration dose.

In liquid effluent, the concentrations of isotopic uranium were below the Minimum Detectable Concentration (MDC) and therefore below the values listed in 10 CFR 20, Appendix B, Table 3, "Releases to Sewers" (Table 1-1).

In gaseous effluent, the gross uranium activity was either below the Minimum Detectable Activity (MDA) or less than 10% of values listed in 10 CFR 20, Appendix B, Table 2, "Effluent Concentrations – Class D Air" for U234, U235, and U238.

The concentrations of isotopic uranium in gaseous effluent was either below the Minimum Detectable Concentration (MDC) or less than 10% of values listed in 10 CFR 20.1301, 10 CFR 20.1302, and 10 CFR 20.1101(d), as described in NRC Regulatory Guide 4.20 "Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees other than Power Reactors" dated December 1996.

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TABLE 1-1

Lift Station 1 Wastewater Effluent – Radionuclides, Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico

| <div style="text-align: center;"> <h1 style="margin: 0;">URENCO USA</h1> Lea County New Mexico </div> | | | | | | | | |
|---|----------------------------|-----------------------|----------------------|---|--|------------------------------|---------------------------|--|
| Lift Station 1 WasteWater Effluent- Radionuclides | | | | | | | | |
| Radionuclide | Sample Date (Date/Time) | Sample Period | Total Time (days) | Results ($\mu\text{Ci}/\text{ml}$) | Counting Uncertainty ($\mu\text{Ci}/\text{ml}$) | Total Flow* (gallons/day) | Quantity Released (Ci) | % of Table 3 of Appendix B to 10 CFR 20 Values-Monthly Average Release to Sewers |
| 1Lift Station 1 - July - December 2023 | | | | | | | | |
| Uranium - 233/234 | 12/21/2023 1023 | 7/01/23 - 12/31/23 | 183 | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Uranium - 235/236 | | | | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Uranium - 238 | | | | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Lift Station 1 Duplicate - July - December 2023 | | | | | | | | |
| Uranium - 233/234 | 12/21/2023 1023 | 7/01/23 - 12/31/23 | 183 | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Uranium - 235/236 | | | | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Uranium - 238 | | | | 0.00E+00 | 0.00E+00 | 13,000 | Result Below LLD | Result Below LLD |
| Comments | | | | | | | | |
| All sample results returned Not Detectable | | | | | | | | |

Notes:

1. * = Table 3.4-4 'Anticipated Normal Plant Water Consumption' from the Environmental Report, Rev. 23, lists "Total Personnel Water Use" as approximately 13,000 gallons per day.
2. $\mu\text{Ci}/\text{mL}$ = microCuries per milliliter.
3. Radionuclides analyzed using method EICHROM AC01 by Cardinal Laboratories of Hobbs, NM.
4. Quantity released is calculated if the result equals or exceeds the LLD. Facility-required lower level of detection (LLD) is $3.09\text{E}-9$ $\mu\text{Ci}/\text{mL}$.

TABLE 1-2

Separations Building Module-1001 (SBM 1001): Pumped Extract Exhaust Gaseous Effluent Vent System, 1001-562-1MA1 & 1001-562-1MA2 Gross Alpha & Beta, and Radionuclides: Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico.

| Separations Building Module - 1001 (SBM 1001) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|---|--------------------------------|---------------------|-------------|---------------------------------------|--------------------------------------|---|--|------------------------------|---|
| Sample ID (Functional Loc. / On Date) | Sample Date (Off Date/Time) | Sample Period | Analyte | Gross Result ($\mu\text{Ci/ml}$) | MDA ($\mu\text{Ci/ml}$) @ 95 CL | Instrument Unc ($\mu\text{Ci/ml}$) | Total Vent System Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1001-562-1MA1 | | | | | | | | | |
| 10015621MA1 070623 | 09/01/2023 1017 | 07/06/23 - 09/01/23 | Gross Alpha | 7.45E-17 | 2.69E-16 | 9.91E-08 | 6.91E+05 | <MDA | <MDA |
| 10015621MA1 090123 | 10/09/223 1038 | 09/01/23 - 10/09/23 | | 5.16E-17 | 3.86E-16 | 6.76E-08 | 5.25E+05 | <MDA | <MDA |
| 10015621MA1 100923 | 11/06/2023 1050 | 10/09/23 - 11/06/23 | | 0.00E+00 | 5.74E-16 | 0.00E+00 | 3.88E+05 | <MDA | <MDA |
| 10015621MA1 110623 | 12/11/2023 0959 | 11/06/23 - 12/11/23 | | 1.25E-16 | 4.52E-16 | 9.91E-08 | 4.85E+05 | <MDA | <MDA |
| 10015621MA1 121123 | 01/05/2024 1058 | 12/11/23 - 01/05/24 | | 0.00E+00 | 6.26E-16 | 0.00E+00 | 3.46E+05 | <MDA | <MDA |
| 10015621MA1 070623 | 09/01/2023 1017 | 07/06/23 - 09/01/23 | Gross Beta | 3.10E-15 | 2.56E-15 | 1.73E-08 | 6.91E+05 | 2.14E-09 | 0.103% |
| 10015621MA1 090123 | 10/09/223 1038 | 09/01/23 - 10/09/23 | | 4.02E-15 | 3.68E-15 | 1.74E-06 | 5.25E+05 | 2.11E-09 | 0.134% |
| 10015621MA1 100923 | 11/06/2023 1050 | 10/09/23 - 11/06/23 | | 3.70E-15 | 5.46E-15 | 1.55E-06 | 3.88E+05 | <MDA | <MDA |
| 10015621MA1 110623 | 12/11/2023 0959 | 11/06/23 - 12/11/23 | | 5.74E-15 | 4.30E-15 | 1.82E-06 | 4.85E+05 | 2.78E-09 | 0.191% |
| 10015621MA1 121123 | 01/05/2024 1058 | 12/11/23 - 01/05/24 | | 7.39E-15 | 5.97E-15 | 1.79E-06 | 3.46E+05 | 2.55E-09 | 0.246% |
| 1001-562-1MA2 | | | | | | | | | |
| 10015621MA2 070623 | 09/01/2023 1022 | 07/06/23 - 09/01/23 | Gross Alpha | 1.35E-16 | 1.01E-15 | 6.76E-08 | 1.63E+05 | <MDA | <MDA |
| 10015621MA2 090123 | 10/09/2023 1040 | 09/01/23 - 10/09/23 | | -7.60E-17 | 3.29E-16 | 4.16E-10 | 6.21E+05 | <MDA | <MDA |
| 10015621MA2 100923 | 11/06/2023 1102 | 10/09/23 - 11/06/23 | | 6.69E-17 | 5.01E-16 | 6.76E-08 | 4.55E+05 | <MDA | <MDA |
| 10015621MA2 110623 | 12/11/2023 1005 | 11/06/23 - 12/11/23 | | 0.00E+00 | 4.02E-16 | 0.00E+00 | 5.73E+05 | <MDA | <MDA |
| 10015621MA2 121123 | 01/05/2024 1110 | 12/11/23 - 01/05/24 | | 6.91E-17 | 5.17E-16 | 6.76E-08 | 4.10E+05 | <MDA | <MDA |
| 10015621MA2 070623 | 09/01/2023 1022 | 07/06/23 - 09/01/23 | Gross Beta | 7.45E-15 | 9.62E-15 | 1.58E-06 | 1.63E+05 | <MDA | <MDA |
| 10015621MA2 090123 | 10/09/2023 1040 | 09/01/23 - 10/09/23 | | 2.01E-15 | 3.13E-15 | 1.86E-06 | 6.21E+05 | <MDA | <MDA |
| 10015621MA2 100923 | 11/06/2023 1102 | 10/09/23 - 11/06/23 | | 3.92E-15 | 4.77E-15 | 1.59E-06 | 4.55E+05 | <MDA | <MDA |
| 10015621MA2 110623 | 12/11/2023 1005 | 11/06/23 - 12/11/23 | | 2.59E-15 | 3.83E-15 | 1.55E-06 | 5.73E+05 | <MDA | <MDA |
| 10015621MA2 121123 | 01/05/2024 1110 | 12/11/23 - 01/05/24 | | 5.00E-15 | 4.93E-15 | 1.66E-06 | 4.10E+05 | 2.05E-09 | 0.167% |

| Separations Building Module - 1001 (SBM 1001) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|---|---------------------------|------------------|---------------------------------|--|--|------------------------------|---------------------------------|------------------------------|--|
| Radionuclide | Sample Date (Off Date) | Sample Period | Result ($\mu\text{Ci/ml}$) | Uncertainty (2 σ TPU) ($\mu\text{Ci/ml}$) | Uncertainty (1 σ TPU) ($\mu\text{Ci/ml}$) | MDC ($\mu\text{Ci/ml}$) | Total Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| Sample ID: 1001-562-1MA1 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 3.87E-16 | 1.60E-16 | 1.63E-16 | 9.15E-17 | 1.22E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 5.55E-17 | 6.73E-17 | 6.74E-17 | 8.30E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 3.47E-16 | 1.49E-16 | 1.51E-16 | 6.72E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 3.12E-16 | 1.47E-16 | 1.49E-16 | 9.00E-17 | 1.22E+06 | 0.00 | 0.01% |
| Uranium-235/236 4th Qtr 2023 | | | 6.25E-17 | 8.18E-17 | 8.19E-17 | 1.25E-16 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.13E-16 | 1.21E-16 | 1.22E-16 | 8.17E-17 | | 0.00 | 0.01% |
| Sample ID: 1001-562-1MA2 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 5.20E-16 | 1.65E-16 | 1.70E-16 | 7.43E-17 | 7.85E+05 | 0.00 | 0.02% |
| Uranium-235/236 3rd Qtr 2023 | | | 2.78E-17 | 4.28E-17 | 4.28E-17 | 6.45E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 3.56E-16 | 1.34E-16 | 1.37E-16 | 5.22E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 2.89E-16 | 9.49E-17 | 9.71E-17 | 3.63E-17 | 1.44E+06 | 0.00 | 0.01% |
| Uranium-235/236 4th Qtr 2023 | | | 1.85E-17 | 3.14E-17 | 3.14E-17 | 5.53E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.25E-16 | 8.39E-17 | 8.54E-17 | 4.55E-17 | | 0.00 | 0.01% |

Notes:

1001-562-1MA1: Filter change-out in August did not occur due to unit maintenance.

1001-562-1MA2: Filter change-out in August did not occur due to redundant monitor (1001-562-1MA1) maintenance.



TABLE 1-3

Separations Building Module-1003 (SBM 1003): Pumped Extract Exhaust Gaseous Effluent Vent System, 1003-562-1MA1 & 1003-562-1MA2 Gross Alpha & Beta, and Radionuclides: Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico

| Separations Building Module -1003 (SBM 1003) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|--------------------------------|---------------------|----------------|---------------------------------------|--------------------------------------|---|-----------------------------------|------------------------------|---|
| Sample ID (Functional Loc. / On Date) | Sample Date (Off Date/Time) | Sample Period | Analyte | Gross Result ($\mu\text{Ci/ml}$) | MDA ($\mu\text{Ci/ml}$) @ 95 CL | Instrument Unc ($\mu\text{Ci/ml}$) | Total Vent System Flow (m3) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1003-562-1MA1 | | | | | | | | | |
| 10035621MA1 070623 | 08/02/2023 1236 | 07/06/23 - 08/02/23 | Gross Alpha | 0.00E+00 | 4.52E-16 | 0.00E+00 | 3.96E+05 | <MDA | <MDA |
| 10035621MA1 080223 | 09/01/2023 1050 | 08/02/23 - 09/01/23 | | 5.37E-17 | 4.02E-16 | 6.76E-08 | 3.64E+05 | <MDA | <MDA |
| 10035621MA1 090123 | 10/09/2023 1115 | 09/01/23 - 10/09/23 | | 1.10E-17 | 2.75E-16 | 2.07E-07 | 4.71E+05 | <MDA | <MDA |
| 10035621MA1 100923 | 11/06/2023 1119 | 10/09/23 - 11/06/23 | | 2.37E-16 | 4.36E-16 | 1.40E-07 | 4.31E+05 | <MDA | <MDA |
| 10035621MA1 110623 | 12/11/2023 1015 | 11/06/23 - 12/11/23 | | 0.00E+00 | 3.47E-16 | 0.00E+00 | 5.41E+05 | <MDA | <MDA |
| 10035621MA1 121123 | 01/05/2024 1348 | 12/11/23 - 01/05/24 | 6.56E-17 | 4.91E-16 | 6.76E-08 | 3.72E+05 | <MDA | <MDA | |
| 10035621MA1 070623 | 08/02/2023 1236 | 07/06/23 - 08/02/23 | Gross Beta | 4.15E-15 | 4.30E-15 | 1.64E-06 | 3.96E+05 | <MDA | <MDA |
| 10035621MA1 080223 | 09/01/2023 1050 | 08/02/23 - 09/01/23 | | 2.40E-15 | 3.83E-15 | 1.53E-06 | 3.64E+05 | <MDA | <MDA |
| 10035621MA1 090123 | 10/09/2023 1115 | 09/01/23 - 10/09/23 | | 2.26E-15 | 2.62E-15 | 1.91E-06 | 4.71E+05 | <MDA | <MDA |
| 10035621MA1 100923 | 11/06/2023 1119 | 10/09/23 - 11/06/23 | | 2.21E-15 | 4.16E-15 | 1.49E-06 | 4.31E+05 | <MDA | <MDA |
| 10035621MA1 110623 | 12/11/2023 1015 | 11/06/23 - 12/11/23 | | 2.23E-15 | 3.30E-15 | 1.55E-06 | 5.41E+05 | <MDA | <MDA |
| 10035621MA1 121123 | 01/05/2024 1348 | 12/11/23 - 01/05/24 | 4.75E-15 | 4.68E-15 | 1.66E-06 | 3.72E+05 | 1.77E-09 | 0.158% | |
| 1003-562-1MA2 | | | | | | | | | |
| 10035621MA2 070623 | 08/02/2023 1245 | 07/06/23 - 08/02/23 | Gross Alpha | 1.64E-16 | 5.94E-16 | 9.91E-08 | 4.37E+05 | <MDA | <MDA |
| 10035621MA2 080223 | 09/01/2023 1055 | 08/02/23 - 09/01/23 | | 1.21E-16 | 4.36E-16 | 9.91E-08 | 3.54E+05 | <MDA | <MDA |
| 10035621MA2 090123 | 10/09/2023 1120 | 09/01/23 - 10/09/23 | | 8.14E-17 | 2.94E-16 | 9.91E-08 | 4.50E+05 | <MDA | <MDA |
| 10035621MA2 100923 | 11/06/2023 1128 | 10/09/23 - 11/06/23 | | 1.13E-16 | 4.08E-16 | 9.91E-08 | 4.53E+05 | <MDA | <MDA |
| 10035621MA2 110623 | 12/11/2023 1020 | 11/06/23 - 12/11/23 | | 1.30E-16 | 3.18E-16 | 1.22E-07 | 5.79E+05 | <MDA | <MDA |
| 10035621MA2 121123 | 01/05/2024 1354 | 12/11/23 - 01/05/24 | 0.00E+00 | 3.98E-16 | 0.00E+00 | 4.04E+05 | <MDA | <MDA | |
| 10035621MA2 070623 | 08/02/2023 1245 | 07/06/23 - 08/02/23 | Gross Beta | 5.74E-15 | 5.66E-15 | 1.66E-06 | 4.37E+05 | 2.51E-09 | 0.191% |
| 10035621MA2 080223 | 09/01/2023 1055 | 08/02/23 - 09/01/23 | | 3.01E-15 | 4.16E-15 | 1.56E-06 | 3.54E+05 | <MDA | <MDA |
| 10035621MA2 090123 | 10/09/2023 1120 | 09/01/23 - 10/09/23 | | 2.70E-15 | 2.80E-15 | 1.64E-06 | 4.50E+05 | <MDA | <MDA |
| 10035621MA2 100923 | 11/06/2023 1128 | 10/09/23 - 11/06/23 | | 4.81E-15 | 3.89E-15 | 1.79E-06 | 4.53E+05 | 2.18E-09 | 0.160% |
| 10035621MA2 110623 | 12/11/2023 1020 | 11/06/23 - 12/11/23 | | 2.35E-15 | 3.03E-15 | 1.58E-06 | 5.79E+05 | <MDA | <MDA |
| 10035621MA2 121123 | 01/05/2024 1354 | 12/11/23 - 01/05/24 | 3.30E-15 | 3.80E-15 | 1.61E-06 | 4.04E+05 | <MDA | <MDA | |

| Separations Building Module -1003 (SBM 1003) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|---------------------------|------------------|---------------------------------|---|---|------------------------------|--------------------|------------------------------|--|
| Radionuclide | Sample Date (Off Date) | Sample Period | Result ($\mu\text{Ci/ml}$) | Uncertainty (2 sigma) ($\mu\text{Ci/ml}$) | Uncertainty (1 sigma) ($\mu\text{Ci/ml}$) | MDC ($\mu\text{Ci/ml}$) | Total Flow (m3) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1003-562-1MA1 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 1.74E-16 | 6.14E-17 | 6.27E-17 | 2.99E-17 | 1.23E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 2.75E-17 | 2.87E-17 | 2.87E-17 | 3.69E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 2.02E-16 | 6.59E-17 | 6.74E-17 | 2.20E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 2.62E-16 | 1.00E-16 | 1.02E-16 | 6.47E-17 | 1.34E+06 | 0.00 | 0.01% |
| Uranium-235/236 4th Qtr 2023 | | | 1.01E-17 | 3.20E-17 | 3.20E-17 | 7.07E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.43E-16 | 9.48E-17 | 9.63E-17 | 5.11E-17 | | 0.00 | 0.01% |
| 1003-562-1MA2 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 3.07E-16 | 9.14E-17 | 9.40E-17 | 3.13E-17 | 1.24E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 0.00E+00 | 2.21E-17 | 2.21E-17 | 4.77E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 3.59E-16 | 9.92E-17 | 1.02E-16 | 2.72E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 1.50E-16 | 6.33E-17 | 6.42E-17 | 3.69E-17 | 1.44E+06 | 0.00 | 0.00% |
| Uranium-235/236 4th Qtr 2023 | | | -7.14E-18 | 1.68E-17 | 1.68E-17 | 4.84E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 8.75E-17 | 4.78E-17 | 4.82E-17 | 3.11E-17 | | 0.00 | 0.00% |

Notes: None



TABLE 1-4

Separations Building Module-1005 (SBM 1005): Pumped Extract Exhaust Gaseous Effluent Vent System, 1005-562-1MA1 & 1005-562-1MA2 Gross Alpha & Beta, and Radionuclides: Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico

| Separations Building Module -1005 (SBM 1005) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|--------------------------------|---------------------|----------------|--------------------------|-------------------------|----------------------------|-----------------------------------|------------------------------|---|
| Sample ID (Functional Loc. / On Date) | Sample Date (Off Date/Time) | Sample Period | Analyte | Gross Result (µCi/ml) | MDA (µCi/ml) @ 95 CL | Instrument Unc (µCi/ml) | Total Vent System Flow (m3) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1005-562-1MA1 | | | | | | | | | |
| 10055621MA1 070623 | 08/02/2023 1256 | 07/06/23 - 08/02/23 | Gross Alpha | -2.61E-18 | 5.06E-16 | 6.76E-08 | 7.12E+05 | <MDA | <MDA |
| 10055621MA1 080223 | 09/01/2023 1134 | 08/02/23 - 09/01/23 | | 2.46E-16 | 4.52E-16 | 1.40E-07 | 8.01E+05 | <MDA | <MDA |
| 10055621MA1 090123 | 10/09/2023 1130 | 09/01/23 - 10/09/23 | | 4.79E-17 | 3.59E-16 | 6.76E-08 | 9.80E+05 | <MDA | <MDA |
| 10055621MA1 100923 | 11/06/2023 1136 | 10/09/23 - 11/06/23 | | 6.44E-37 | 4.82E-16 | 6.76E-08 | 7.34E+05 | <MDA | <MDA |
| 10055621MA1 110623 | 12/11/2023 1035 | 11/06/23 - 12/11/23 | | 0.00E+00 | 3.75E-16 | 0.00E+00 | 9.35E+05 | <MDA | <MDA |
| 10055621MA1 121123 | 01/05/2024 1343 | 12/11/23 - 01/05/24 | | 2.18E-16 | 5.33E-16 | 1.22E-07 | 6.83E+05 | <MDA | <MDA |
| 10055621MA1 070623 | 08/02/2023 1256 | 07/06/23 - 08/02/23 | Gross Beta | 3.55E-15 | 4.82E-15 | 1.68E-06 | 7.12E+05 | <MDA | <MDA |
| 10055621MA1 080223 | 09/01/2023 1134 | 08/02/23 - 09/01/23 | | 3.95E-15 | 4.30E-15 | 1.63E-06 | 8.01E+05 | <MDA | <MDA |
| 10055621MA1 090123 | 10/09/2023 1130 | 09/01/23 - 10/09/23 | | 3.13E-15 | 3.42E-15 | 1.63E-06 | 9.80E+05 | <MDA | <MDA |
| 10055621MA1 100923 | 11/06/2023 1136 | 10/09/23 - 11/06/23 | | 5.54E-15 | 4.59E-15 | 1.73E-06 | 7.34E+05 | 4.07E-09 | 0.185% |
| 10055621MA1 110623 | 12/11/2023 1035 | 11/06/23 - 12/11/23 | | 3.10E-15 | 3.57E-15 | 1.61E-06 | 9.35E+05 | <MDA | <MDA |
| 10055621MA1 121123 | 01/05/2024 1343 | 12/11/23 - 01/05/24 | | 4.65E-15 | 5.07E-15 | 1.63E-06 | 6.83E+05 | <MDA | <MDA |
| 1005-562-1MA2 | | | | | | | | | |
| 10055621MA2 070623 | 08/02/2023 1300 | 07/06/23 - 08/02/23 | Gross Alpha | 1.48E-16 | 5.36E-16 | 9.91E-08 | 7.29E+05 | <MDA | <MDA |
| 10055621MA2 080223 | 09/02/2023 1139 | 08/02/23 - 09/01/23 | | 1.32E-16 | 4.77E-16 | 9.91E-08 | 8.14E+05 | <MDA | <MDA |
| 10055621MA2 090123 | 10/09/2023 1135 | 09/01/23 - 10/09/23 | | 5.04E-17 | 3.78E-16 | 6.76E-08 | 1.01E+06 | <MDA | <MDA |
| 10055621MA2 100923 | 11/06/2023 1142 | 10/09/23 - 11/06/23 | | 0.00E+00 | 5.08E-16 | 0.00E+00 | 7.55E+05 | <MDA | <MDA |
| 10055621MA2 110623 | 12/11/2023 1040 | 11/06/23 - 12/11/23 | | 5.28E-17 | 3.95E-16 | 6.76E-08 | 9.67E+05 | <MDA | <MDA |
| 10055621MA2 121123 | 01/05/2024 1345 | 12/11/23 - 01/05/24 | | 0.00E+00 | 3.98E-16 | 0.00E+00 | 4.04E+05 | <MDA | <MDA |
| 10055621MA2 070623 | 08/02/2023 1300 | 07/06/23 - 08/02/23 | Gross Beta | 4.68E-15 | 5.11E-15 | 1.63E-06 | 7.29E+05 | <MDA | <MDA |
| 10055621MA2 080223 | 09/02/2023 1139 | 08/02/23 - 09/01/23 | | 2.11E-15 | 4.55E-15 | 1.53E-06 | 8.14E+05 | <MDA | <MDA |
| 10055621MA2 090123 | 10/09/2023 1135 | 09/01/23 - 10/09/23 | | 4.34E-15 | 3.60E-15 | 1.73E-06 | 1.01E+06 | 4.40E-09 | 0.145% |
| 10055621MA2 100923 | 11/06/2023 1142 | 10/09/23 - 11/06/23 | | 4.66E-16 | 4.84E-15 | 1.32E-06 | 7.55E+05 | <MDA | <MDA |
| 10055621MA2 110623 | 12/11/2023 1040 | 11/06/23 - 12/11/23 | | 5.45E-15 | 3.77E-15 | 1.80E-06 | 9.67E+05 | 5.27E-09 | 0.182% |
| 10055621MA2 121123 | 01/05/2024 1345 | 12/11/23 - 01/05/24 | | 4.33E-15 | 3.80E-15 | 1.76E-06 | 4.04E+05 | 1.75E-09 | 0.144% |

| Separations Building Module -1005 (SBM 1005) Pumped Extract Exhaust (PXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|---------------------------|------------------|--------------------|--------------------------------------|--------------------------------------|-----------------|--------------------|------------------------------|--|
| Radionuclide | Sample Date (Off Date) | Sample Period | Result (µCi/ml) | Uncertainty (2 sigma) (µCi/ml) | Uncertainty (1 sigma) (µCi/ml) | MDC (µCi/ml) | Total Flow (m3) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1005-562-1MA1 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 2.98E-16 | 9.04E-17 | 9.28E-17 | 3.17E-17 | 2.49E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 1.61E-17 | 2.74E-17 | 2.74E-17 | 4.83E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 1.75E-16 | 6.80E-17 | 6.91E-17 | 2.75E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 2.42E-16 | 9.06E-17 | 9.23E-17 | 4.91E-17 | 2.35E+06 | 5.70E-10 | 0.008% |
| Uranium-235/236 4th Qtr 2023 | | | 3.62E-17 | 3.94E-17 | 3.95E-17 | 4.82E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.16E-16 | 8.75E-17 | 8.88E-17 | 6.39E-17 | | 0.00E+00 | 0.007% |
| 1005-562-1MA2 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 1.83E-16 | 8.50E-17 | 8.60E-17 | 4.11E-17 | 2.56E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 1.20E-17 | 3.33E-17 | 3.33E-17 | 7.20E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 1.75E-16 | 8.46E-17 | 8.55E-17 | 5.82E-17 | | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 3.03E-16 | 9.90E-17 | 1.01E-16 | 3.29E-17 | 2.13E+06 | 6.44E-10 | 0.010% |
| Uranium-235/236 4th Qtr 2023 | | | 5.77E-17 | 5.01E-17 | 5.03E-17 | 5.77E-17 | | 0.00 | 0.00% |
| Uranium-238 4th Qtr 2023 | | | 2.65E-16 | 9.31E-17 | 9.50E-17 | 4.67E-17 | | 0.00E+00 | 0.009% |

Notes: None



TABLE 1-5

Cylinder Receipt and Dispatch Building-1100 (CRDB 1100): Local Extract Exhaust Gaseous Effluent Vent System, 1100-562-1MA1 & 1100-562-1MA2, Gross Alpha & Beta, and Radionuclides: Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico

| Container Receipt and Dispatch Building -1100 (CRDB 1100) Exhaust (FHGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|--------------------------------|---------------------|----------------|---------------------------------------|--------------------------------------|---|--|------------------------------|---|
| Sample ID (Functional Loc. / On Date) | Sample Date (Off Date/Time) | Sample Period | Analyte | Gross Result ($\mu\text{Ci/ml}$) | MDA ($\mu\text{Ci/ml}$) @ 95 CL | Instrument Unc ($\mu\text{Ci/ml}$) | Total Vent System Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1100-562-1MA1 | | | | | | | | | |
| 11005621MA1 070623 | 08/02/2023 1310 | 07/06/23 - 08/02/23 | Gross Alpha | 2.35E-16 | 4.32E-16 | 1.40E-07 | 6.67E+05 | <MDA | <MDA |
| 11005621MA1 080223 | 09/01/2023 1144 | 08/02/23 - 09/01/23 | | 5.20E-17 | 3.89E-16 | 6.76E-08 | 7.34E+05 | <MDA | <MDA |
| 11005621MA1 090123 | 10/09/2023 1100 | 09/01/23 - 10/09/23 | | 0.00E+00 | 3.12E-16 | 0.00E+00 | 9.67E+05 | <MDA | <MDA |
| 11005621MA1 100923 | 11/07/2023 0940 | 10/09/23 - 11/07/23 | | 5.32E-17 | 3.98E-16 | 6.76E-08 | 7.23E+05 | <MDA | <MDA |
| 11005621MA1 110723 | 12/11/2023 1050 | 11/07/23 - 12/11/23 | | 6.65E-17 | 3.40E-16 | 9.91E-08 | 8.60E+05 | <MDA | <MDA |
| 11005621MA1 121123 | 01/05/2024 1358 | 12/11/23 - 01/05/24 | 1.90E-16 | 4.64E-16 | 1.22E-07 | 6.11E+05 | <MDA | <MDA | |
| 11005621MA1 070623 | 08/02/2023 1310 | 07/06/23 - 08/02/23 | Gross Beta | 4.18E-15 | 4.12E-15 | 1.66E-06 | 6.67E+05 | 2.79E-09 | 0.139% |
| 11005621MA1 080223 | 09/01/2023 1144 | 08/02/23 - 09/01/23 | | 1.61E-15 | 3.71E-15 | 1.46E-06 | 7.34E+05 | <MDA | <MDA |
| 11005621MA1 090123 | 10/09/2023 1100 | 09/01/23 - 10/09/23 | | 3.45E-15 | 2.98E-15 | 1.71E-06 | 9.67E+05 | 3.34E-09 | 0.115% |
| 11005621MA1 100923 | 11/07/2023 0940 | 10/09/23 - 11/07/23 | | 2.02E-15 | 3.80E-15 | 1.49E-06 | 7.23E+05 | <MDA | <MDA |
| 11005621MA1 110723 | 12/11/2023 1050 | 11/07/23 - 12/11/23 | | 2.18E-15 | 3.23E-15 | 1.65E-06 | 8.60E+05 | <MDA | <MDA |
| 11005621MA1 121123 | 01/05/2024 1358 | 12/11/23 - 01/05/24 | 4.70E-15 | 4.42E-15 | 1.68E-06 | 6.11E+05 | 2.87E-09 | 0.157% | |
| 1100-562-1MA2 | | | | | | | | | |
| 11005621MA2 070623 | 08/02/2023 1315 | 07/06/23 - 08/02/23 | Gross Alpha | 0.00E+00 | 6.12E-16 | 0.00E+00 | 2.31E+05 | <MDA | <MDA |
| 11005621MA2 080223 | 09/01/2023 1146 | 08/02/23 - 09/01/23 | | -6.93E-17 | 4.87E-16 | 2.59E-10 | 4.77E+05 | <MDA | <MDA |
| 11005621MA2 090123 | 10/09/2023 1103 | 09/01/23 - 10/09/23 | | 0.00E+00 | 5.16E-16 | 0.00E+00 | 1.17E+05 | <MDA | <MDA |
| 11005621MA2 100923 | 11/07/2023 1040 | 10/09/23 - 11/07/23 | | 1.93E-16 | 4.73E-16 | 1.22E-07 | 6.08E+05 | <MDA | <MDA |
| 11005621MA2 110723 | 12/11/2023 1053 | 11/07/23 - 12/11/23 | | 5.32E-17 | 3.98E-16 | 6.76E-08 | 7.53E+05 | <MDA | <MDA |
| 11005621MA2 121123 | 01/05/2024 1400 | 12/11/23 - 01/05/24 | 1.56E-16 | 5.65E-16 | 9.91E-08 | 4.69E+05 | <MDA | <MDA | |
| 11005621MA2 070623 | 08/02/2023 1315 | 07/06/23 - 08/02/23 | Gross Beta | 7.32E-15 | 5.83E-15 | 1.74E-06 | 2.31E+05 | 1.69E-09 | 0.244% |
| 11005621MA2 080223 | 09/01/2023 1146 | 08/02/23 - 09/01/23 | | 1.62E-15 | 4.63E-15 | 1.55E-06 | 4.77E+05 | <MDA | <MDA |
| 11005621MA2 090123 | 10/09/2023 1103 | 09/01/23 - 10/09/23 | | 6.40E-15 | 4.91E-15 | 1.76E-06 | 1.17E+05 | 7.46E-10 | 0.213% |
| 11005621MA2 100923 | 11/07/2023 1040 | 10/09/23 - 11/07/23 | | 6.52E-15 | 4.50E-15 | 1.80E-06 | 6.08E+05 | 3.97E-09 | 0.217% |
| 11005621MA2 110723 | 12/11/2023 1053 | 11/07/23 - 12/11/23 | | 3.97E-15 | 3.80E-15 | 1.73E-06 | 7.53E+05 | 2.99E-09 | 0.132% |
| 11005621MA2 121123 | 01/05/2024 1400 | 12/11/23 - 01/05/24 | 5.19E-15 | 5.38E-15 | 1.64E-06 | 4.69E+05 | <MDA | <MDA | |

| Container Receipt and Dispatch Building -1100 (CRDB 1100) Fume Hood Exhaust (FHGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|---------------------------|------------------|---------------------------------|---|---|------------------------------|---------------------------------|------------------------------|--|
| Radionuclide | Sample Date (Off Date) | Sample Period | Result ($\mu\text{Ci/ml}$) | Uncertainty (2 sigma) ($\mu\text{Ci/ml}$) | Uncertainty (1 sigma) ($\mu\text{Ci/ml}$) | MDC ($\mu\text{Ci/ml}$) | Total Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1100-562-1MA1 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 2.30E-16 | 8.18E-17 | 8.35E-17 | 4.57E-17 | 2.37E+06 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 1.38E-17 | 2.37E-17 | 2.37E-17 | 4.07E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 1.95E-16 | 7.39E-17 | 7.52E-17 | 3.30E-17 | 2.19E+06 | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | | | 2.62E-16 | 8.73E-17 | 8.93E-17 | 4.13E-17 | | 0.00 | 0.01% |
| Uranium-235/236 4th Qtr 2023 | | | 2.55E-17 | 3.34E-17 | 3.34E-17 | 5.09E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.27E-16 | 8.10E-17 | 8.26E-17 | 4.12E-17 | | 0.00 | 0.01% |
| 1100-562-1MA2 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 10/9/2023 | 7/6/23 - 10/9/23 | 2.90E-16 | 1.07E-16 | 1.09E-16 | 4.60E-17 | 8.24E+05 | 0.00 | 0.01% |
| Uranium-235/236 3rd Qtr 2023 | | | 1.50E-17 | 3.35E-17 | 3.35E-17 | 6.71E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | 1/5/2024 | 10/9/23 - 1/5/24 | 3.20E-16 | 1.12E-16 | 1.14E-16 | 3.99E-17 | 1.83E+06 | 0.00 | 0.01% |
| Uranium-233/234 4th Qtr 2023 | | | 2.27E-16 | 9.39E-17 | 9.53E-17 | 4.02E-17 | | 0.00 | 0.01% |
| Uranium-235/236 4th Qtr 2023 | | | 7.52E-18 | 2.38E-17 | 2.38E-17 | 5.70E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 2.20E-16 | 9.39E-17 | 9.52E-17 | 5.80E-17 | | 0.00 | 0.01% |

Notes:



TABLE 1-6

Cylinder Receipt and Dispatch Building-1100 (CRDB 1100): Fume Hood Exhaust Gaseous Effluent Vent System, 1100-562-2MA1 & 1100-562-2MA2, Gross Alpha & Beta, and Radionuclides: Quarters 3 & 4, 2023 URENCO USA Lea County, New Mexico

| Container Receipt and Dispatch Building -1100 (CRDB 1100) Fume Hood Exhaust (LXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|--------------------------------|---------------------|----------------|---------------------------------------|--------------------------------------|---|--|------------------------------|---|
| Sample ID (Functional Loc. / On Date) | Sample Date (Off Date/Time) | Sample Period | Analyte | Gross Result ($\mu\text{Ci/ml}$) | MDA ($\mu\text{Ci/ml}$) @ 95 CL | Instrument Unc ($\mu\text{Ci/ml}$) | Total Vent System Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1100-562-2MA1 | | | | | | | | | |
| 11005622MA1 070623 | 08/02/2023 1319 | 07/06/23 - 08/02/23 | Gross Alpha | 6.56E-17 | 4.91E-16 | 6.76E-08 | 1.51E+07 | <MDA | <MDA |
| 11005622MA1 080223 | 09/01/2023 1148 | 08/02/23 - 09/01/23 | | 9.40E-17 | 7.04E-16 | 6.76E-08 | 3.11E+07 | <MDA | <MDA |
| 11005622MA1 090123 | 11/09/2023 1130 | 09/01/23 - 11/09/23 | | 2.70E-16 | 6.59E-16 | 1.22E-07 | 2.04E+07 | <MDA | <MDA |
| 11005622MA1 110923 | 12/11/2023 1056 | 11/09/23 - 12/11/23 | | 2.92E-17 | 4.91E-16 | 6.76E-08 | 2.38E+07 | <MDA | <MDA |
| 11005622MA1 121123 | 01/05/2024 1401 | 12/11/23 -01/05/24 | | 6.90E-14 | 5.16E-13 | 6.76E-08 | 6.78E+02 | <MDA | <MDA |
| 11005622MA1 070623 | 08/02/2023 1319 | 07/06/23 - 08/02/23 | Gross Beta | 6.78E-16 | 4.68E-15 | 1.34E-06 | 1.51E+07 | <MDA | <MDA |
| 11005622MA1 080223 | 09/01/2023 1148 | 08/02/23 - 09/01/23 | | 6.68E-15 | 6.70E-15 | 1.71E-06 | 3.11E+07 | <MDA | <MDA |
| 11005622MA1 090123 | 11/09/2023 1130 | 09/01/23 - 11/09/23 | | 5.76E-15 | 6.28E-15 | 1.63E-06 | 2.04E+07 | <MDA | <MDA |
| 11005622MA1 110923 | 12/11/2023 1056 | 11/09/23 - 12/11/23 | | 1.81E-15 | 4.68E-15 | 1.55E-06 | 2.38E+07 | <MDA | <MDA |
| 11005622MA1 121123 | 01/05/2024 1401 | 12/11/23 -01/05/24 | | 3.56E-15 | 4.92E-15 | 1.56E-06 | 6.78E+02 | <MDA | <MDA |
| 1100-562-2MA2 | | | | | | | | | |
| 11005622MA2 070623 | 08/02/2023 1324 | 07/06/23 - 08/02/23 | Gross Alpha | 1.06E-16 | 7.96E-16 | 6.76E-08 | 2.79E+02 | <MDA | <MDA |
| 11005622MA2 080223 | 12/11/2023 1059 | 08/02/23 - 12/11/23 | | 4.73E-17 | 1.71E-16 | 9.91E-08 | 1.33E+08 | <MDA | <MDA |
| 11005622MA2 121123 | 01/05/2024 1403 | 12/11/23 - 01/05/24 | | 3.42E-16 | 8.35E-16 | 1.22E-07 | 7.18E+02 | <MDA | <MDA |
| 11005622MA2 070623 | 08/02/2023 1324 | 07/06/23 - 08/02/23 | Gross Beta | 6.59E-15 | 7.58E-15 | 1.61E-06 | 2.79E+02 | <MDA | <MDA |
| 11005622MA2 080223 | 12/11/2023 1059 | 08/02/23 - 12/11/23 | | 1.57E-15 | 1.63E-15 | 1.64E-06 | 1.33E+08 | <MDA | <MDA |
| 11005622MA2 121123 | 01/05/2024 1403 | 12/11/23 - 01/05/24 | | 7.29E-15 | 7.95E-15 | 1.63E-06 | 7.18E+02 | <MDA | <MDA |

| Container Receipt and Dispatch Building -1100 (CRDB 1100) Local Extract Exhaust (LXGEVS) Gaseous Effluent Vent System-Gross Alpha & Beta | | | | | | | | | |
|--|---------------------------|-----------------|---------------------------------|---|---|------------------------------|---------------------------------|------------------------------|--|
| Radionuclide | Sample Date (Off Date) | Sample Period | Result ($\mu\text{Ci/ml}$) | Uncertainty (2 sigma) ($\mu\text{Ci/ml}$) | Uncertainty (1 sigma) ($\mu\text{Ci/ml}$) | MDC ($\mu\text{Ci/ml}$) | Total Flow (m ³) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR 20 Values |
| 1100-562-2MA1 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 9/1/2023 | 7/6/23 - 9/1/23 | 3.19E-16 | 1.31E-16 | 1.33E-16 | 6.94E-17 | 4.62E+07 | 1.47E-08 | 0.011% |
| Uranium-235/236 3rd Qtr 2023 | | | 4.82E-17 | 6.31E-17 | 6.32E-17 | 9.63E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 3.20E-16 | 1.30E-16 | 1.32E-16 | 6.30E-17 | | 0.00E+00 | 0.011% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 9/1/23 - 1/5/24 | 4.04E-16 | 1.24E-16 | 1.28E-16 | 5.39E-17 | 4.41E+07 | 0.00 | 0.013% |
| Uranium-235/236 4th Qtr 2023 | | | 7.76E-17 | 6.18E-17 | 6.21E-17 | 6.65E-17 | | 0.00 | 0.003% |
| Uranium-238 4th Qtr 2023 | | | 2.85E-16 | 1.02E-16 | 1.04E-16 | 3.79E-17 | | 0.00 | 0.010% |
| 1100-562-2MA2 | | | | | | | | | |
| Uranium-233/234 3rd Qtr 2023 | 8/2/2023 | 7/6/23 - 8/2/23 | 1.53E-15 | 5.09E-16 | 5.21E-16 | 1.97E-16 | 2.79E+02 | 4.26E-13 | 0.051% |
| Uranium-235/236 3rd Qtr 2023 | | | 2.51E-16 | 2.42E-16 | 2.42E-16 | 3.01E-16 | | Result Below MDC | Result Below MDC |
| Uranium-238 3rd Qtr 2023 | | | 9.77E-16 | 4.08E-16 | 4.14E-16 | 2.47E-16 | | 0.00E+00 | 0.033% |
| Uranium-233/234 4th Qtr 2023 | 1/5/2024 | 8/2/23 - 1/5/24 | 2.94E-16 | 9.49E-17 | 9.72E-17 | 4.61E-17 | 1.33E+08 | 0.00 | 0.010% |
| Uranium-235/236 4th Qtr 2023 | | | 3.39E-17 | 3.50E-17 | 3.51E-17 | 3.74E-17 | | Result Below MDC | Result Below MDC |
| Uranium-238 4th Qtr 2023 | | | 3.47E-16 | 1.03E-16 | 1.06E-16 | 3.82E-17 | | 0.00 | 0.012% |

Notes:

1100-562-2MA1: Total Vent System Flow for filter period 8/2/23 - 9/1/23 collected from redundant monitor (1100-562-2MA2) due to maintenance issue on 2MA1 unit.
 Filter change-out in October did not occur due to unit maintenance.
 1100-562-2MA2: Filter change-out in September, October, and November did not occur due to redundant monitor (1100-562-2MA1) maintenance.

- Ci = Curies
- $\mu\text{Ci/ml}$ = micro-Curies per milliliter.
- m³ = cubic meters.
- MDA = minimum detectable activity.
- MDC= minimum detectable concentration.
- Quantity released is calculated if the result Equals or Exceeds MDA or MDC.
- Radionuclides analyzed using Procedure EPA 908.0 Modified by Eberline Analytical Corp of Oak Ridge, TN.
- Gross alpha and beta analyzed by URENCO USA per procedure EN-3-3030-01.

